KMC Title 22 Subdivisions
Chapter 22.28.xx Design Requirements

New Section

Lots – Small Lot Single Family

In the Market and Norkirk Neighborhoods, for those subdivisions not subject to Sections 22.28.030 and 22.28.040, the minimum lot area shall be deemed to be met if at least one half of the lots created contain no less than the minimum lot size required in the zoning district in which the property is located. The remaining lots may contain less than the minimum required lot size, provided that such "small lots" meet the following standards:

(a) Within the RS 6.3 and RS 7.2 zones, the minimum lot size is 5000 square feet.

(b) Within the RS 8.5 zone, the minimum lot size is 6000 square feet.

(c) The narrow portion of a flag lot that is usable only for driveway access to the buildable portion of the lot may not be counted in the lot area of a small lot.

(d) The Floor Area Ratio (FAR) shall not exceed.3 or .4. The FAR restriction shall be recorded on the face of the Plat.

ATTACHMENT 1
PC memo Small Lot S.F. Hist. Pres.
Feb 8, 2007

Section 15.10

USE ZONE CHART

DIRECTIONS: FIRST, read down to find use... THEN, across for REGULATIONS

Section .010	USE ⇩ / REGULATIONS ⇨	Required Review Process	MINIMUMS: Lot Size	MINIMUMS: REQUIRED YARDS (See Ch. 115): Front	Side	Rear	MINIMUMS: Lot Coverage	MAXIMUMS: Height of Structure	Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Req'd Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
.010	Detached Dwelling Unit	None	As established on the Zoning Map. See Spec. Reg. 1.	20' See Spec. Reg. 3.	5', but 2 side yards must equal at least 15 feet.	10'	50% See Spec. Reg. 5.	25' above average building elevation.	E	A	2.0 per dwelling unit.	1. Minimum lot size per dwelling unit is as follows: a. In RS 35 zones, the minimum lot size is 35,000 square feet. b. In RS 12.5 zones, the minimum lot size is 12,500 square feet. c. In RS 8.5 zones, the minimum lot size is 8,500 square feet. d. In RS 7.2 zones, the minimum lot size is 7,200 square feet. e. In RS 6.3 zones, the minimum lot size is 6,300 square feet. f. In RS 5.0 zones, the minimum lot size is 5,000 square feet. In RS 35, 12.5, 8.5, 7.2, 6.3 and 5.0 zones, not more than one dwelling unit may be on each lot, regardless of the size of each lot. 2. Floor Area Ratio (F.A.R.) allowed for the subject property is as follows: a. In RS 35 zones, F.A.R. is 20 percent of lot size. b. In RS 12.5 zones, F.A.R. is 35 percent of lot size. c. In RS 8.5 zones, F.A.R. is 50 percent of lot size. d. In RS 7.2 zones, F.A.R. is 50 percent of lot size. e. In RS 6.3 zones, F.A.R. is 50 percent of lot size. f. In RS 5.0 zones, F.A.R. is 50 percent of lot size; provided, that F.A.R. may be increased up to 60 percent of lot size for the first 5,000 square feet of lot area if the following criteria are met: i. The primary roof form of all structures on the site is peaked, with a minimum pitch of four feet vertical: 12 feet horizontal; and ii. A setback of at least 7.5 feet is provided along each side yard. g. In the Market and Norkirk Neighborhoods, for small lot(s) created through Section 22.28.xx of the Subdivision Ordinance, FA.R is ((.3 / .4.)) *This special regulation is not effective within the disapproval jurisdiction of the Houghton Community Council.* See KZC 115.42, Floor Area Ratio (F.A.R.) Calculation for Detached Dwelling Units in Low Density Residential Zones, for additional information. 3. On corner lots with two required front yards, one may be reduced to the average of the front yards for the two adjoining properties fronting the same street as the front yard to be reduced. The applicant may select which front yard will be reduced (see Plate 24). 4. Chapter 115 KZC contains regulations regarding home occupations and other accessory uses, facilities and activities associated with this use. 5. Residential lots in RS 35 zones within the Bridle Trails neighborhood north of Bridle Trails State Park must contain a minimum area of 10,000 permeable square feet, which shall comply with Special Regulation 6 for large domestic animals in KZC 115.20(4) (chart).

ATTACHMENT 2
P.C. memo Small Lot Ord
Feb 8, 2017

ATTACHMENT 3
P.C. memo Small Lot S.F. + Hist. Pres.
Feb 8, 07

Michael Luis & Associates

MEMORANDUM

To: Joan Lieberman-Brill

From: Michael Luis

Date: 1-30-07

Re: Proposal to allow subdivision of oversize residential lots in Norkirk

This memo assesses the potential response of homebuilders to the proposal to allow creation of additional smaller building lots on parcels between 12,200 and 13,319 square feet in the Norkirk neighborhood.

The proposal would allow such parcels to be divided into two lots, one of at least 7,200 square feet, which is the current legal minimum for the zone, and the other of at least 5,000 square feet. The proposal limits development on the 5,000 square foot lot to a floor area ratio (FAR) of 0.3 or 0.4 (yet to be decided) but considers various FARs for both lots. This analysis looks at two questions:

Given FAR restrictions, would builders likely take advantage of the ability to create two smaller lots, or would they prefer to keep the original large lot and build a larger home with a larger yard?

What would be the impact on the preference of builders of various FAR restrictions that could apply to the split lots?

Under the proposal, builders developing these larger lots would have the option of either keeping the larger lot intact or subdividing. So, if the City's goal is to encourage construction of additional, smaller homes, the incentive should lean toward subdivision. For purposes of this analysis, the primary consideration in estimating the builder's decision will be the relative profitability of any given scenario. Other considerations are noted at the end.

The following data and analysis looks at several issues in the market that would influence a developer's decision to split a lot under the program or to retain the lot intact.

The impact of lot size on home prices. Do buyers value additional land such that larger lots result in higher per-square-foot prices for homes? This question will be examined for both the resale and new construction markets.

Price of development sites. When acquiring land to build new houses, are builders paying more for larger lots than for smaller lots? In other words, does land itself have a measurable value, or is the purchase just based on the existence of a legal building site?

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ATTACHMENT 4
P.C. memo Small Lot SF + Hist Pres
Feb 8, 07

Current practices in homebuilding with respect to FAR. Are builders maxing out the FAR they are allowed when building on larger lots? If so, do these larger homes bring a higher value than a pair of smaller homes would bring on the same site?

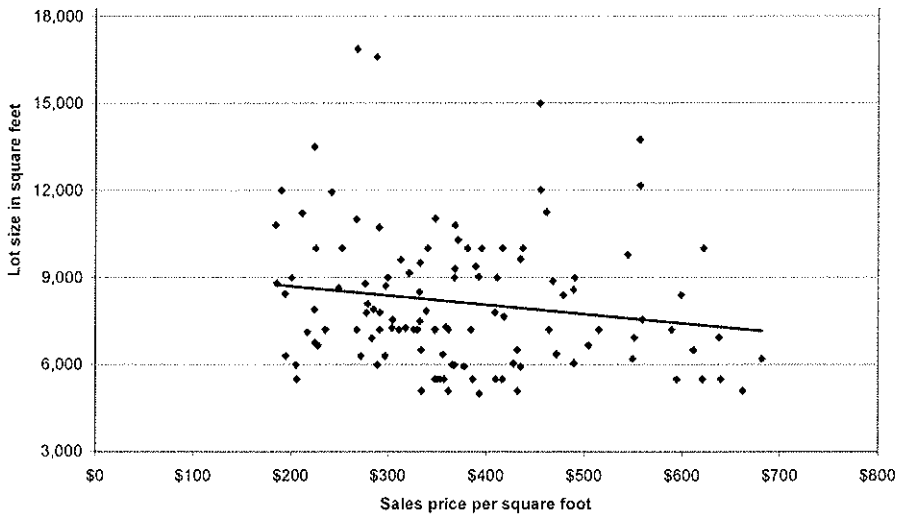
These trends are illustrated through a series of scatter-plots of home sales data that looks for the impact of various factors on each other. This analysis is followed by some hypothetical development scenarios that compare the option of building a larger home on the larger intact lot versus two smaller homes on the subdivided lot. For the subdivided examples, several different FARs will be shown.

Impact of lot size on home price

The first question is whether larger lots result in higher value homes. If they do, builders might opt to keep a larger parcel intact to reap the higher value that a buyer would place on the extra space.

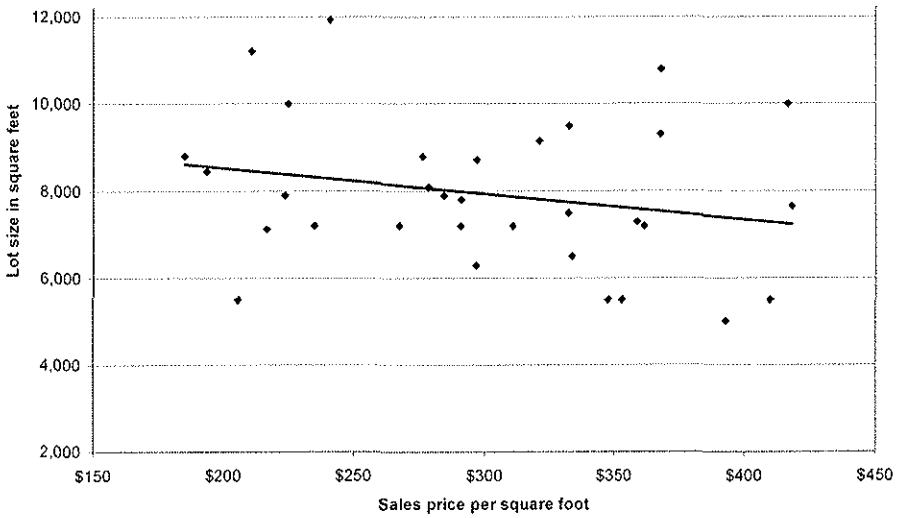
Figure 1 shows a scatter plot of lot sizes and per-square-foot sales prices of 115 homes sold in the Norkirk neighborhood from mid-2005 to present. (This data, which is used several times below, was obtained from domania.com). The relationships are quite diffuse, which it to be expected in an eclectic neighborhood like Norkirk, where the housing stock varies widely in age, condition and size. Nonetheless, the sample shows an actual negative relationship between lot size and home values, indicating that homes on smaller lots bring higher prices.

Figure 1:
Relationship of lot size to sales price in Norkirk resale market 2005-2006
All resale properties



Given that the homes plotted in Figure 1 likely include teardowns as well as some newer, high value homes, Figure 2 shows just the homes sold that were built between 1968 and 1998. This plot also shows a negative relationship, but one that, given the shallow slope and diffuse pattern, is statistically questionable.

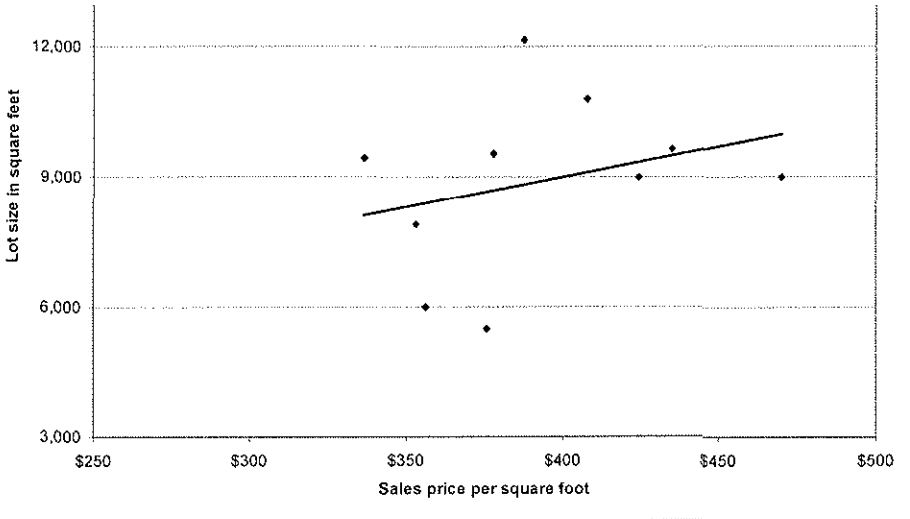
Figure 2:
Relationship of lot size to sales price in Norkirk resale market 2005-2006
Homes built between 1968 and 1998



There are many possible explanations for these counterintuitive negative relationships, but it is clear that larger lot sizes do not bring significant value to home sales in the resale market.

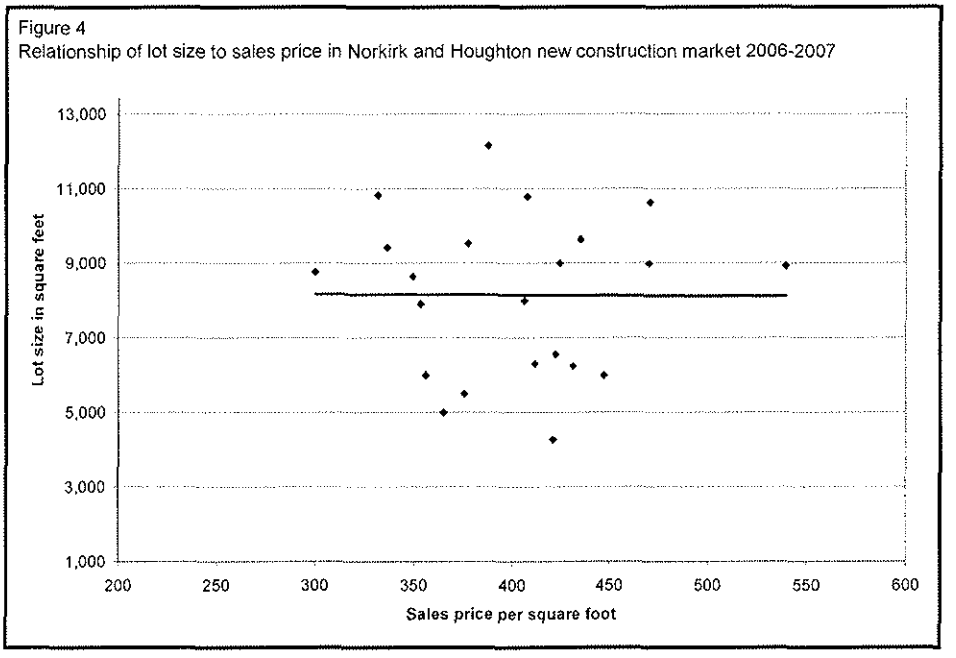
Turning to the new construction market, Figure 3 shows the relationship between lot size and per-square-foot sales prices of new homes in the Norkirk neighborhood that are either for sale now, or sold in the last few months (This data, which is used several times below, was obtained from Northwest Multiple Listing Service and the King County Assessor). The trend line is upward, but given the diffuse results and small sample, the trend is not meaningful.

Figure 3
Relationship of lot size to sales price in Norkirk new construction market 2006-2007



We can get a better sample by widening the net to include new construction in the Houghton neighborhood, which is similar, but somewhat higher priced. (The sample of homes in Houghton are all located west of I-405, between Kirkland Avenue and NE 61st St.) Figure 4 shows the lot size to price comparison for new construction in Houghton and Norkirk combined. This plot shows a very diffuse pattern and no relationship at all between lot size and price.

Figure 4
Relationship of lot size to sales price in Norkirk and Houghton new construction market 2006-2007



The data for both existing homes and for new construction show no meaningful relationship between home values, as expressed in sales price per-square-foot, and lot sizes. If we could control for all factors that affect new home prices – location, views, topography – we could probably find a more positive relationship, but the Norkirk neighborhood is so varied that it is not possible to control for all those factors.

We can safely conclude that lot size will not have a major impact on the sales value of homes on a per-square-foot basis, and that any smaller impact that lot size might have will be overwhelmed by other factors. Therefore, splitting a lot will not have a negative impact on the builder's ability to create a high value product.

Price of development sites

Determining the cost of development sites in the Norkirk and Houghton areas is easy, since there are very few subdivisions and most homes are built on exiting lots. Some of these lots have been vacant for various reasons, while others had existing houses that were demolished. By looking at the prices paid for development sites we can see if builders place a premium on larger parcels.

Figure 5
Relationship of lot size to lot sales price in Norkirk new construction market 2006-2007

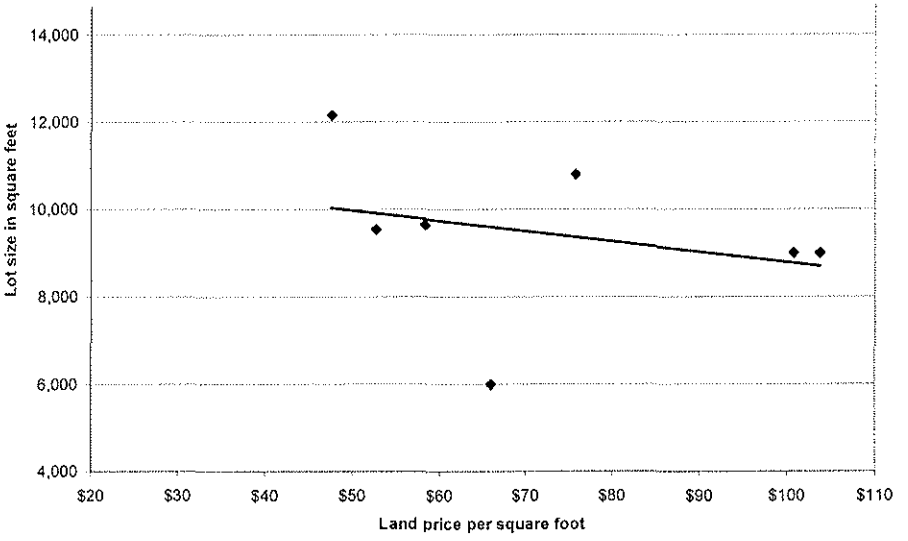


Figure 5 shows, for new homes built in Norkirk, the relationship between parcel size and the price paid for that parcel by the homebuilder (prices adjusted to an approximation of early 2007 values, based on average price increases for Kirkland). The data set is small, but the trend shows that per-square-foot prices for building sites fall with size. Another way to look at pricing is that square footage beyond the minimum needed to build a house is not worth very much. Although prices for building sites vary quite a bit, there is no indication that larger parcels are significantly more prized by builders than parcels that are just adequate for construction of a house appropriate to the market. (Academic literature that addresses this question concludes that larger lot sizes do not bring additional value.)

Current building practices: size, price and FAR

The next relevant questions surround the size of the homes that are likely to be built in the Norkirk neighborhood. Under the lot-splitting proposal, builders would have the choice of building two smaller homes rather than one larger one, so we need to know something about home sizes and the relative profitability of larger versus smaller homes.

First, we can look at the relationship of the size of homes to the value of them: do larger homes fetch a different per-square-foot price than smaller ones?

Figure 6 shows a robust negative relationship between size and home value for the set of existing homes sold in the Norkirk neighborhood in the past 18 months or so: smaller homes bring much higher prices per square foot. Again, accounting for the probable tear-downs among older and smaller homes, Figure 7 covers homes built after 1960 and over 1,000 square feet. This shows the same negative relationship, although the relationship is weaker and the data is more diffuse.

Figure 6
Relationship of house size to sales price in Norkirk resale market 2005-2006
All resale properties

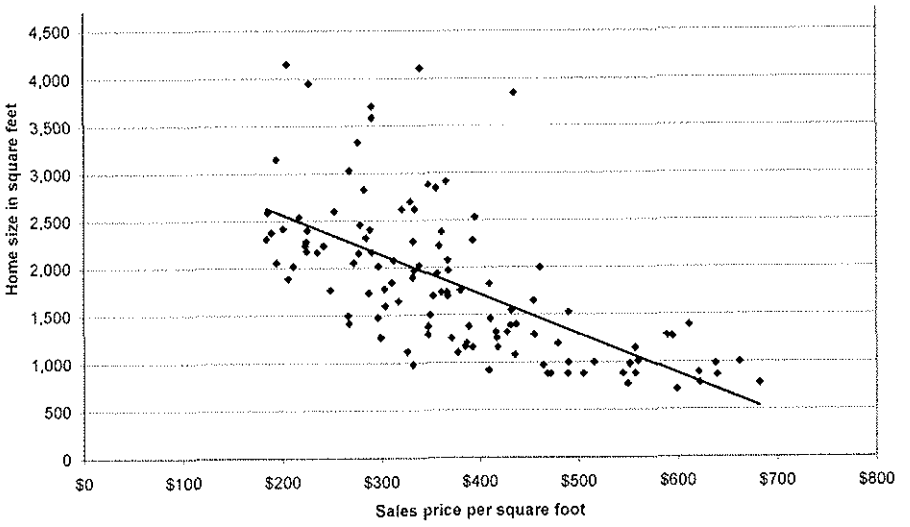
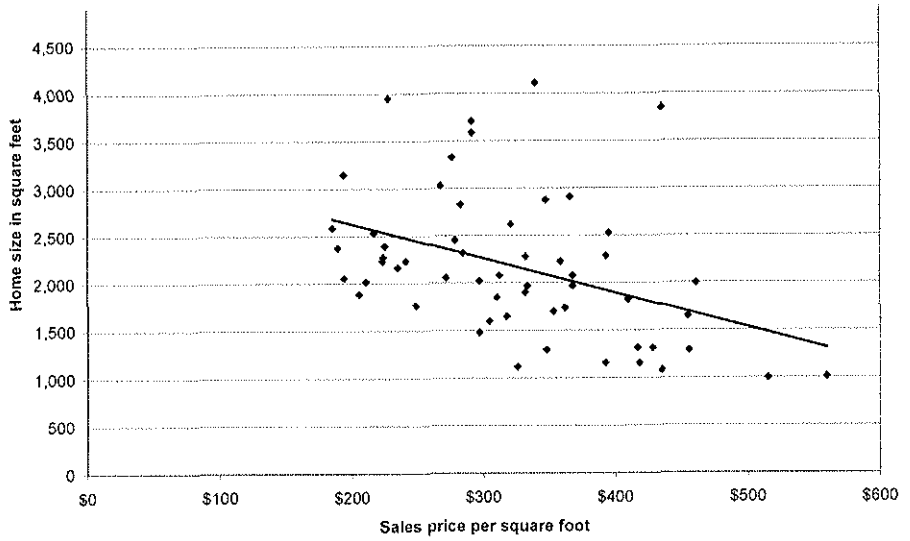


Figure 7
Relationship of home size to sales price in Norkirk resale market 2005-2006
Homes built after 1960 and larger than 1,000 square feet



For new construction, Figure 8 shows this relationship for the handful of new homes recently on the market in Norkirk. It shows a slight positive relationship, but as with Figure 3, the sample is small and the data is diffuse. Figure 9, which uses the larger sample that includes Houghton, shows a negative relationship of home size to home price per-square foot.

Figure 8
Relationship of home size to sales price in Norkirk new construction market 2006-2007

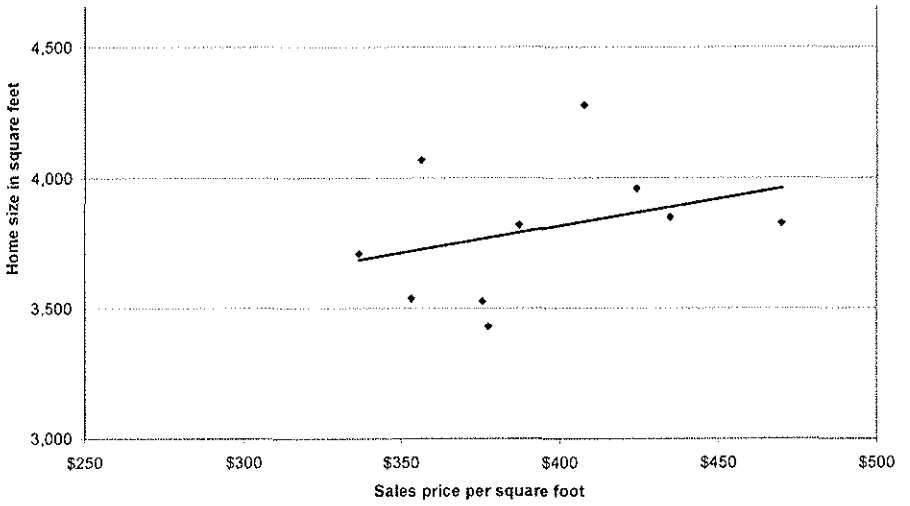
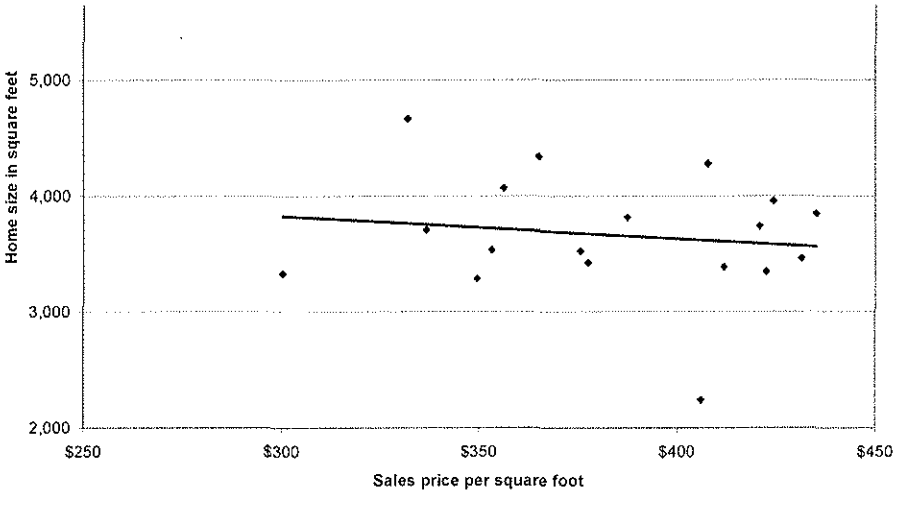


Figure 9
Relationship of home size to sales price in Norkirk and Houghton new construction market 2006-2007

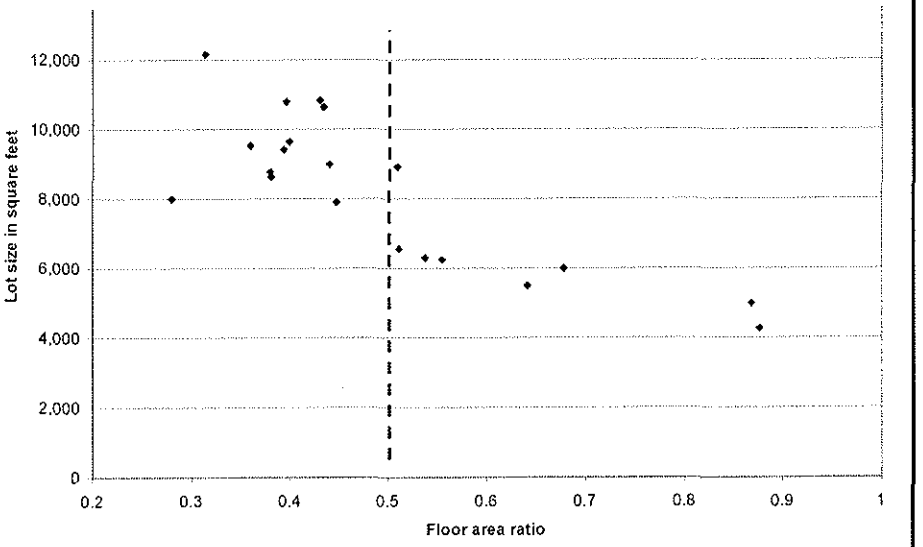


In the resale market the explanation for the negative size-price relationship is simply that for older homes in the Norkirk neighborhood the value is mostly in the land, so a smaller house will sell for not much less than a larger one, giving the smaller house a higher per-square-foot price. In new construction, larger homes usually have lower per-square-foot cost because they include larger spaces that are relatively inexpensive to build.

But just how large will builders go? Most of Kirkland, Central Houghton being a notable exception, currently has a ceiling on FAR of 0.5. We need to see if builders are maxing out the potential size of homes within that ceiling. Figure 10 shows the relationship of lot sizes to

FAR among homes built in Norkirk and Houghton. Over half of the new homes fall below the 0.5 FAR ceiling in these areas, indicating that builders are not maxing out their allowable FAR, but rather, are taking cues from the market about how big a house they can sell easily.

Figure 10
Relationship of lot size to FAR in Norkirk and Houghton new construction market 2006-2007



The conclusion is that in Norkirk a builder will not be able to get a higher sales value for a larger home, and that builders are not going much over 4,100 square feet, even when the lot size and FAR would allow it. Because we have very little data on prices of new homes in Norkirk in the 3,200 square foot range, it is difficult to know whether per-square-foot prices would be similar in that size range. One builder interviewed said that homes in the 3,200 square foot range would have a per-square-foot cost similar to the larger homes. Given the negative trend line in Figure 9, the modeling below will assume a slightly higher price per-square-foot for the 3,200 square foot home.

The choice: one house or two

We have determined that lot size and home size are not significant drivers of sales value on a per-square-foot basis. We have also determined that builders will not likely exceed 4,100 square feet in Northkirk, even if they have enough land under the 0.5 FAR to go larger. We can now model the two options to see how a builder might pencil out the decision to use a large parcel for one house or two, as allowed in the proposal.

The models use the following sales values:

Large home:	$390 per square foot
Medium sized home:	$400 per square foot
Smaller home:	$420 per square foot

Scenario #1: minimum lot size, 0.4 FAR for smaller home(Figure 11)
In this scenario, the lot size is the smallest allowed under the program, and the large home is just at the upper end of homes currently being built in Norkirk. For the two-home option the FAR remains at 0.5 for the large home and at 0.4 for the smaller. The result is that the two-home option is 22 percent more profitable than the one-home option.

Figure 11

Lot Size (s.f.): 12,200

	One large home	Two homes		
		First	Second	Combined
Lot size	12,200	7,200	5,000	12,200
Max FAR	0.5	0.5	0.4	0.46
Home size	4,100	3,200	1,600	4,800
price/sf	$390	$400	$420	$407
Home price	$1,599,000	$1,280,000	$672,000	$1,952,000
profit margin	9%	9%	9%	9%
Profit	$143,910	$115,200	$60,480	$175,680

Scenario #2: minimum lot size, lower FAR for both smaller homes (Figure 12)
In this scenario, everything is the same as #1, except that the FAR is set at 0.4 for both of the smaller homes. Lowering the FAR for both homes to 0.4 results in a profit barely higher than constructing the one larger home.

Figure 12

Lot Size (s.f.): 12,200

	One large home	Two homes		
		First	Second	Combined
Lot size	12,200	7,200	5,000	12,200
Max FAR	0.5	0.4	0.4	0.4
Home size	4,100	2,480	1,600	4,080
price/sf	$390	$420	$420	$420
Home price	$1,599,000	$1,041,600	$672,000	$1,713,600
profit margin	9%	9%	9%	9%
Profit	$143,910	$93,744	$60,480	$154,224

Scenario #3: minimum lot size, cottage-sized FAR for smaller home (Figure 13)
For this scenario, we keep the minimum lot size and the 0.5 FAR for the larger of the pair of homes, but go to an FAR of 0.3 for the smaller, resulting in a home more typical of cottage-style development. The cottage has a one-car garage. The result is a development that still exceeds the profitability of the larger home.

Figure 13

Lot Size (s.f.): 12,200

	One large home	Two homes		
		First	Second	Combined
Lot size	12,200	7,200	5,000	12,200
Max FAR	0.5	0.5	0.3	0.43
Home size	4,100	3,200	1,300	4,500
price/sf	$390	$400	$420	$406
Home price	$1,599,000	$1,280,000	$546,000	$1,826,000
profit margin	9%	9%	9%	9%
Profit	$143,910	$115,200	$49,140	$164,340

Scenario #4: minimum lot size, 0.3 FAR for both homes (Figure 14)
This last scenario has both homes in the two-home option built at an FAR of 0.3. Both are assumed to have one-car garages. In this scenario the two-home option is far less profitable than the one-home option.

Figure 14

Lot Size (s.f.): 12,200

	One large home	Two homes		
		First	Second	Combined
Lot size	12,200	7,200	5,000	12,200
Max FAR	0.5	0.3	0.3	0.33
Home size	4,100	1,960	1,300	3,260
price/sf	$390	$420	$420	$420
Home price	$1,599,000	$823,200	$546,000	$1,369,200
profit margin	9%	9%	9%	9%
Profit	$143,910	$74,088	$49,140	$123,228

Other considerations

The scenarios judge the feasibility of the lot-splitting proposal, and the various approaches to FAR, strictly on their impact on profitability. There are, of course, other considerations that may lead a developer to lean one way or the other. Some of those are:

Considerations favoring two houses

Lower price point means a wider market

Smaller homes will be priced less and, therefore, have a wider pool of buyers. When the economy softens it is the luxury market that usually feels it first. Building expensive spec houses carries the risk that the wealthy buyers who seemed abundant at the beginning of construction will be more scarce when the project is complete.

Smaller homes target emerging markets

Kirkland is an attractive market for downsizers and empty-nesters who often favor smaller homes. The success of cottage projects in Kirkland and Redmond indicates that there are buyers willing to pay high per-square-foot prices for well-built smaller homes.

Few smaller new homes on the market

The prices of land for conventional lots is quite high and forces builders toward large homes at expensive price points. This leaves few products on the market at smaller sizes and lower prices, pointing to a market opportunity for anyone who can hit those size and price targets.

Opportunity to save an existing house

An applicable parcel may have an existing house that would be worth saving if the remainder of the parcel could accommodate an additional house. This provides an opportunity for an owner to keep their existing house while gaining value for their land.

Considerations favoring single-house

Avoid costly subdivision process

The process of subdividing land, even a short subdivision, can be time consuming and expensive. If the lot splitting proposal envisions using Kirkland's existing short-plat mechanism, builders will need to weigh the cost and delay of that process against the larger profit potential of building two houses. For example, a delay of six months in short platting a parcel that cost the builder $600,000 will result in interest expenses of around $20,000. In addition to interest expenses, the builder must pay planning, engineering and legal costs.

Provide amenities favored by the luxury market

A larger home is able to accommodate features and amenities sought by buyers in the luxury market. In shrinking from a 4,000 square foot house to a 3,200 square foot house the builder loses at least one garage space plus the potential for an elaborate media room, game room, exercise room, formal spaces or work spaces. Many buyers who can afford to spend over $1.5 million expect many, and perhaps all, of these amenities.

Manage a single project rather than two
The basic management tasks of building a house must be done twice for the lot-split option. With the homes next to each other and being built at the same time this may be a minor extra expense, but one which a builder may wish to avoid.

Conclusion

The proposal to allow creation of two legal lots on oversized parcels could be attractive to builders. There is no market advantage to offering large lots and no major business advantage to offering larger homes. Builders can lower their risk by building lower priced homes and address an unmet market need, while potentially seeing higher profits. For this option to remain attractive, the code must address:

FAR. As shown in the various scenarios, the maximum FAR allowed on the two lots will determine the feasibility.

Short plat process. A short plat process that is expensive and time consuming may wipe out the additional profit from the two-house option and dissuade builders from taking it.

Norkirk Lot Split Proposal Estimating Tool

Use this tool to estimate the impacts on profitability of changing various parameters of development. Change only the numbers in the yellow boxes. Other numbers are fixed or are automatically calculated.

Lot Size (s.f.): 12,200

	One large home	Two homes		
		First	Second	Combined
Lot size	12,200	7,200	5,000	12,200
Max FAR	0.5	0.5	0.4	0.46
Home size	4,100	3,200	1,600	4,800
Garage sf		400	400	800
price/sf	$390	$400	$420	$407
Home price	$1,599,000	$1,280,000	$672,000	$1,952,000
profit margin	9%	9%	9%	9%
Profit	$143,910	$115,200	$60,480	$175,680